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National Tuberculosis
Association

The effect of tuberculosis
institutions on the value...

New York

1914

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THE EFFECT OF TUBERCULOSIS
INSTITUTIONS ON THE VALUE
AND DESIRABILITY OF
SURROUNDING
PROPERTY

308

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By

THE NATIONAL ASSOCIATION FOR THE STUDY
AND PREVENTION OF TUBERCULOSIS

"The trouble with this matter is that antiquated ideas and unfounded impressions still prevail among those who have not made a study of the subject."

Hamilton W. Mabie

105 East 22d Street
NEW YORK
1914

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INTRODUCTION

The question of the effect of institutions for the treatment of tuberculosis upon the value and desirability of surrounding property has been and still is raised with almost every attempt to locate a hospital, sanatorium, or dispensary. Nearly all such attempts call forth the same objections which are met with varying effectiveness depending upon the information available. The National Association for the Study and Prevention of Tuberculosis has prepared this report, in order that the recital of experience and the opinions contained in it may prevent needless discussion, and facilitate the locating of future institutions by giving all parties concerned access to full and authoritative information on the subject.

The study is divided into eight parts as follows:

I. A review of former investigations of this character, including those by William H. Baldwin and Philip P. Jacobs.

II. Information obtained from a questionnaire study of eighty-four hospitals and sanatoria in all sections of the United States with regard to the change in surrounding property values; the effect of these institutions on the health of the neighbors; the original reasons for opposition and the present feeling; some material benefits of an institution to the neighborhood; and many pertinent comments by superintendents on all phases of the question.

III. Facts obtained in a first hand investigation of five institutions in different localities and of different types, to show the rise or fall of assessed valuation of surrounding property; the increase of property values indicated by known sales; the expressed feeling of property owners; and the feeling of the general public.

IV. A digest of several typical laws regulating the approval of sites, and some restrictive ordinances.

V. Some opinions of eminent men, boards of health, and insurance companies.

VI. Court decisions relating to the location of hospitals, sanatoria and dispensaries, including the possibility of their being a menace to public health, or a nuisance.

VII. Summary and Conclusions.

VIII. Appendix, with assessment tables referring to hospitals in Chapter II.

CHAPTER I

A Review of Previous Studies

The first comprehensive investigation of the relation of tuberculosis hospitals and sanatoria to surrounding property was conducted by the questionnaire method, by William H. Baldwin, of Washington, D. C. His report was read before the Second Annual Meeting (1906) of the National Association for the Study and Prevention of Tuberculosis, at Washington, D. C. Liberal quotations presenting the most interesting facts and conclusions from the fund of valuable information collected by Mr. Baldwin, are presented here because the original report is not generally available:

Effect of Any Institution Upon Property Values

"In studying this effect two elements are to be distinguished, the influence of the building and improvements as such, and the purpose for which these are used.

"It may be said that as a rule the erection of any building not in itself objectionable, by taking up a certain amount of land and so decreasing the remainder available, while increasing the purposes for which it may be used, enhances the value of the surrounding land and so is an advantage to it. The value of any piece of land is determined by many influences, depending upon the various uses to which it may be put. Unoccupied land is likely to be used first for grazing or farming, then, as population increases, for residences, and later for business purposes, manufacturing or trade, or both. So far as the value of surrounding property is concerned, that building is most desirable which best fulfills the general purpose for which land in the vicinity is used—a good farm-house in the country, or a fine residence on an improved street, or a large store in the business section.

"A building, no matter what its use, which is discordant in any way lessens the desirability of contiguous property and so detracts from its value, as a store in a residence street. Generally speaking, any large institution of which the inmates are not united by association or community of interest with the people of a closely settled neighborhood, in which it is placed, is a detriment to property about it. Beauty of buildings or of grounds may decrease this disadvantage in spite of the lack of connection between it and its environment.

"Suburban or country property is not so much affected by such an institution because initial values are less, and may be so low that its presence will cause values to rise. An increase in population, other things being equal, helps values, and the institution may be relatively large enough to

have this effect. Such improvement may be limited and should be compared with what might have taken place or the extent to which it might hereafter be likely to go if there had been no such institution.

"Hospitals of any kind would be objectionable to some people, partly because of the reason given above and partly because the proximity of suffering or sickness is in itself distasteful. A detention hospital raises this opposition to the superlative degree, and prospective neighbors have been known to fight off such a necessary refuge for the unfortunates requiring treatment somewhere with all the fervor of a holy war.

"This leads us to the element in the problem of the effect of the institution on the value of surrounding property—the knowledge that it is for tuberculous patients. In itself, it must be objectionable, for tuberculosis is now known to be communicable rather than hereditary, and those who know no more are likely to fear and avoid it. Fuller knowledge dispels the fear and shows that under the training of a well-conducted sanatorium, there is less danger of infection from a hundred patients than from two uneducated consumptives going at will about the streets and disposing of their sputum in the way most convenient for themselves. We cannot overcome all the disadvantages of an institution, as such, but we can and should be sure that it is not in the slightest degree a menace to the health of those who live near it. This danger being therefore imaginary rather than real, there remains the interference with the serenity of people in the neighborhood who come in contact with men and women whose appearance often discloses the struggle for life they are making, in which some are not winning.

Change in Value of Property

"In order to learn the facts concerning sanatoria, already established, an inquiry was addressed to seventy-seven of the largest of such institutions throughout the United States and in Canada.

"Although the question as to any change in the value of the land owned by the institution, measured either by its valuation for taxation when acquired and now, or in other ways, bears directly on the subject and was plainly asked, it was not answered in thirty of the responses, and four replied that the land was not valued for taxation. The other twenty-five reported as follows: 3 increased; 3 much increased; 10 doubled in value or more; 9 no change.

"In no case is it stated that the land on which the institution is situated has decreased in value, and as its worth depends largely upon the value of surrounding property, there is nothing in this to indicate an unfavorable effect of the sanatorium.

"Coming directly to the difference in the character of value of adjacent property since the founding of the sanatorium, an answer more or less definite has been obtained as to each.

"In 58 per cent. of the instances, there has been an increase in the value of the land adjacent, accompanied in 17 per cent. by a change for the better in the purposes for which it is used; in 35 per cent., there has been no change, and in 7 per cent., a more or less marked depreciation in land immediately adjoining is admitted. In one instance, this effect is for a distance of 400 to 800 feet, in another up to 1,500, while in the other two cases, the opinion is given that the presence of the sanatorium has prevented or would prevent sales.

Attitude of the Community

"Connected with the foregoing, both as cause and effect, is the attitude of the community toward the institution. In one case it is not stated, in thirty-seven it is said that there has been no opposition at any time, in two that there was once vigorous opposition, in five that there is some objection still, and in fourteen that there was once opposition, which has since disappeared."

Some Individual Instances*

"Some reference to individual instances may be instructive. The Cullis Consumptives' Home for Advanced Cases at New Dorchester, a part of Boston, Massachusetts, was removed to its present location in 1871. There was no opposition then, but there was considerable when a permit was asked for the new building in 1896, due, probably, to the discovery meantime that the disease is communicable. A careful examination showed that there was no danger and proved that the death rate from tuberculosis in that ward was the lowest in the city. Further experience has made warm friends of nearly all those who were in opposition eight years ago. The assessed value of surrounding land is about five times as great as it was in 1870.

"The Brooklyn Home for Consumptives was established in 1881 and has been removed to another location since. There has been no objection to it in either place. No employee, though some of them have served eighteen years, has ever contracted the disease. The institution is well kept and one of the board of health officers has expressed the wish that there were a hundred more like it.

"St. Joseph's Hospital for Consumptives, in New York, started in 1882, has apparently had no unfavorable effect upon values, perhaps because it occupies an entire block and is surrounded by a garden which gives light and air to the apartment houses which have since been built up around it. There has never been any opposition to it, and values of adjacent property have increased from one-fourth to one-half.

"These three are fair examples of the influence of a well-conducted sanatorium in the city."

A Little Knowledge Dangerous

"A study of these various instances indicates that twenty years ago there was indifference to the establishment in the neighborhood of an institution for the treatment of tuberculosis. A partial knowledge of the nature of the disease has produced a hyper-sensitiveness in regard to it and developed opposition which a fuller experience removes in time. In some cases this opposition is due to prejudice rather than to any feeling of danger or the possibility of any considerable decrease in the commercial value of property.

"So in the establishment of a sanatorium, it sometimes seems that the real obstacle is the prejudice, the groundless fear, the unreasonable and unreasoning opposition of the people, in comparison with which the raising of funds, the removal of rocks, and the construction of buildings are trifles. Where such antagonism exists, whether just or not, it demands consideration and any needless interference with values should be avoided. Experience has proved that there is absolutely no danger from a well-conducted sanatorium, and that there is no valid reason for fear in regard to it. Too much emphasis cannot be laid upon this point; but it is easier to explain this to the few people in the suburbs or in the country than to the many in a more thickly populated section. Whatever damage there is will be less in the case of property not already very valuable than in that of residential streets or fine suburban homes."

In discussing this paper at the time it was read, Homer Folks, of New York, said:

Judgment in Selecting Sites

"The chairman, Mr. Baldwin, did not refer to our experience in establishing a tuberculosis dispensary in the Borough of Brooklyn. The health department of the city endeavored to locate the first and only tuberculosis dispensary in the Borough of Brooklyn. It selected a building and the residents of the neighborhood protested vigorously and finally brought a suit to enjoin the health department from establishing a dispensary at this place.

* These opinions were given in 1906; it should be noted.

Although those who were interested in the establishment of the dispensary felt no special concern over the suit, feeling sure that no court of high degree would decide that such a dispensary would be dangerous to the health of the residents, they were disappointed. Excellent medical authorities submitted affidavits in evidence showing that such a dispensary would be of absolutely no danger to the community, but in what I think I may call a most extraordinary decision, it was held that the evidence of the physicians was not at all conclusive and that there could be no doubt that such a dispensary would be very dangerous indeed to the health of the neighborhood, and the department was enjoined. That still stands and there is no dispensary there today (1906)."

Where the Danger Lies

Continuing the discussion, John H. Lowman, M.D., of Cleveland, President of the National Association in 1914, remarked:

"A well-conducted sanatorium is almost absolutely free from danger and it is in no degree a menace to the public.

"Turban of Davos (Switzerland) states that there has never been but one case of tuberculosis that has developed among his employees—that of a maid who washed the linen of the patients. Although 3,000 patients have been treated in his institution, this is the only case in which there has been any suspicion of contagion. Joel of Goerbersdorf (Germany) has failed to find a single case of infection in the institutions there, although 13,000 patients have been treated in them.

"Cultures have been repeatedly made from the walls of sanatoria in the wards and rooms where patients stay, and in no case have the bacilli been found. It would seem that a sanatorium is the place most free from dangers of infection.

"According to Dr. Coate's (Manchester) experiments, 60 per cent. of the houses in which consumptives live are infected. Thus it is the uninformed patient who is a danger to the community and not the supervised patient in a sanatorium. Were these facts known and understood by the public the fear of contagion, which is the origin of the opposition to the sanatorium, would disappear and the present difficulties would cease."

A Later Study

In 1909, Philip P. Jacobs, then Assistant Secretary of the National Association for the Study and Prevention of Tuberculosis, conducted by the questionnaire method an investigation of the effects of 37 institutions located in 22 different states in all parts of the country. The findings of this investigation were tabulated and given to the press of the country. Some quotations are significant:

"According to information received from sanatorium superintendents, real estate dealers, and various disinterested parties, 76.5 per cent. of these tuberculosis sanatoria have had a favorable influence upon surrounding property, and have been a benefit to the community in which they were located. In the case of 23, or 62.2 per cent. of the institutions, the presence of the sanatorium helped to increase the assessed valuation of surrounding property. In only one instance has property decreased in value, and there it was due to ignorance of the facts. In 22 out of the 37 cases, the presence of a sanatorium has even been helpful in the recent sale of land, and in only four places has

* There are now several in other sections of the city, and in this same general neighborhood.

any detrimental effect on sales been shown. In 51.3 per cent. of the cases, residents have been attracted to the community by the sanatorium, and in only three localities have residents been repelled. Some examples show the increase in the value of surrounding property. In the vicinity of a sanatorium in Portland, Ore., land has more than doubled in value in three years, and is in demand close to the sanatorium. At Aiken, S. C., property in the neighborhood of the local sanatorium has increased 400 per cent. since the institution was built. At Hebron, Me., surrounding property has increased 20 per cent. as a direct result of the presence of a tuberculosis sanatorium. A similar effect upon land values has taken place in other towns, such as Luzerne, Pa., Liberty, N. Y., Saranac Lake, N. Y., Pittsford, Vt., Mt. Vernon, Mo., and Silver City, N. Mex. At Asheville, N. C., vacant lots near one of the sanatoria in that city sell at four times their price in 1900 and those farther from the institution but nearer the city are less valuable. Not a single instance was reported where the presence of a tuberculosis sanatorium, camp or dispensary in a large city has had a detrimental effect on the value of surrounding property."

CHAPTER II

A Questionnaire Study of Eighty-four Institutions

During 1913, the office of the National Association for the Study and Prevention of Tuberculosis obtained by the questionnaire method a large fund of information relating to the effect of tuberculosis institutions in all sections of the United States on the value and desirability of surrounding property. The questions, which were directed to the superintendents of institutions, were answered in a way that gives assurance of their reliability, and in most instances were complete. Eighty-four replied to some or all of the questions. The facts thus obtained support those collected in the earlier investigations.

A review of this data shows that of the 84 institutions, 2 were federal sanatoria, 18 were state sanatoria, 10 were county or municipal hospitals, 32 private charitable sanatoria or hospitals, and 22 private commercial hospitals, operated for profit. The institutions include tuberculosis sanatoria and hospitals of all sizes and kinds, distributed geographically in almost every section of the country.

Length of Operation

With regard to the length of operation, fourteen of the institutions have been running for ten years, thirty-one from five to ten years, twenty from three to five years, seventeen from one to three years and only two less than one year. Since seventy-five per cent. of these institutions have been in operation five years or more, their influence has had time to become well defined.

Density of Neighboring Population

With regard to the density of population in the neighborhoods where the institutions are located, fourteen of the eighty-four are located in districts which may be called "thickly" settled, while seventy are in sections that may be designated as "sparsely" settled. These facts were checked for accuracy by replies to a question which asked the superintendent to give the distance from the sanatorium of the nearest dwelling.

Character of District

As to the character of the districts in which the various institutions are located, fifty-seven are situated in farming districts and twenty-seven are situated in residential districts, while so far as learned none of the eighty-four are in wholly industrial districts.

Value of Institution Property

The value of the sanatorium property when the institutions were opened is worthy of consideration. While exact figures are not given in all cases, the designations are sufficiently accurate for this purpose. The value of the sites at the time of the opening of the sanatoria was in five cases less than \$10 per acre; in twenty-eight, it was from \$10 to \$100 per acre; in sixteen, it was from \$100 to \$300 per acre; in four, it was from \$300 to \$500 per acre; in three, it was from \$500 to \$1,000 per acre; in five, it was from \$1,000 to \$3,000 per acre; in one, it was over \$3,000 per acre; and in twenty-two the value was not specified. The information previously given as to the character of the districts is thus supported by these facts, that the great proportion of the sanatoria were erected on property which did not cost more than \$300 per acre.

Increase of Surrounding Property Values

To ascertain whether the property surrounding the sanatoria has increased or decreased in value, questions were asked not only to determine the exact value of surrounding property at the time of opening and the present value, but also whether or not building operations have been carried on in the neighborhood. A tabulation of the replies to these queries shows that in sixty-four cases, the value of surrounding property has in-

creased. In not a single instance of the eighty-four reported has the value decreased, although in fourteen cases, the value of the surrounding property has remained approximately the same as it was when the sanatorium was opened. Six of the answers to these questions were not sufficiently definite for classification.

Beneficial Effect of Institutions

Each correspondent was asked whether his sanatorium has had a beneficial or detrimental effect upon the value of surrounding property. Answers to this question show that in forty-eight cases sanatoria have had a direct beneficial effect on the value of surrounding property. In only three cases was any indication given that the presence of the sanatorium has had a detrimental effect, although in twenty-one cases the presence of the sanatorium apparently has had no effect whatever, and in four instances the possible effect has been doubtful. Eight answers to this question were not definite enough for classification.*

An Aid to Health

In answer to the question whether the sanatorium has had a beneficial or detrimental effect upon the health of people living near it, fifty-five replied, most of them with emphasis, that the presence of the sanatorium has had a beneficial effect, while not a single one testified to a detrimental effect. In ten cases, there was some doubt as to the definite benefit of the institution on the health of the community, and in six it seemed to have no effect, while thirteen did not answer this question fully.

Supplementing the foregoing tabular summary, a few of the more interesting comments made by the correspondents in answering the questions submitted are given:

Increase in Property Values

The following answers refer to the question asking for an opinion on the effect of the sanatoria upon the value of surrounding property. The figures in parenthesis refer to the date of opening of the respective institutions:

* See page 19 for opinions on this subject.

From A. H. Garvin, M.D., Superintendent of the State Hospital for Incipient Tuberculosis at Ray Brook, New York (1904):

"The actual economic value of Adirondack forest land is, in my opinion, about \$4 an acre. I have known of large tracts to be for sale at \$1 an acre. A fair average value of land about the Saranac country is \$3 an acre, I believe. The fact that it sells for more is solely on account of Saranac Lake. The hospital land cost \$20 an acre, at least twice as much as it was worth. The land in the immediate vicinity of the hospital has assumed values out of all proportion to its actual worth. One farm, which, in the central part of the State would not bring more than \$6,000 or \$7,000, is held at \$15,000. Plots of land near the hospital are selling for \$100 an acre. One kind lady who owned a small plot of five acres adjoining the Sanatorium property kindly offered to sell it to me for \$8,000. I offered her \$50.

"Of course, I do not believe that Saranac experience or special health resort experience would be necessarily paralleled through the country. Falkenstein Sanatorium, of course, vastly increased the value of the property, but this was the second pioneer establishment in Germany, and, as one would say in business, the good will of the establishment was a very valuable asset.

"Farm lands, especially such as have a vantage point to the sanatorium for supplies, would naturally increase very much in value."

From David Russell Lyman, M.D., Superintendent, Gaylord Farm Sanatorium, Wallingford, Conn. (1904):

"All land in our vicinity has more than doubled in value."

From F. H. Dillingham, M.D., Physician-in-chief, St. Joseph's Hospital, now located in a thickly settled portion of New York City (1882):

"Property increased very much. Was sparsely settled before hospital was built."

From Samuel B. English, M.D., Superintendent, New Jersey Sanatorium for Tuberculous Diseases, Glen Gardner, N. J. (1907):

"Increased at least 50 per cent. or more than when the Sanatorium was opened."

From Estes Nichols, M.D., Maine Sanatorium, Hebron, Me. (1904):

"Increase of about 20 per cent. of valuation and tax."

From C. S. Butts, M.D., Superintendent, Philadelphia Jewish Sanatorium, Eagleville, Pa. (1909):

"Yes, 25 per cent. to 50 per cent. Property which had been long for sale has all been sold. Now occupied. New homes have sprung up from time to time and at present quite a large building operation within four squares of the sanatorium is nearing completion, all residences."

From Ralph Hunt, M.D., Day Camp Anti-Tuberculosis League of the Oranges (1909):

"All property in the neighborhood has increased in value."

From F. M. Pottenger, M.D., Pottenger Sanatorium, Monrovia, California (1903):

"It has increased. One piece of eleven acres was offered me at \$4,000. The same could not be purchased today for \$30,000."

From H. V. Pettit, M.D., Superintendent, Ottawa Tuberculosis Colony, Ottawa, Ill. (1904):

"The value of adjoining property was temporarily depressed as a result of our presence, but within two years afterward it commenced to increase in value and now has increased over 33 1/2 per cent. above its value at the time of our inception (1904)."

From G. F. Sauer, Superintendent, The Hospital and House of Rest for Consumptives, in a rapidly developing part of New York City (1869):

"Increased at least 100 per cent."

From Edward L. Trudeau, M.D., Adirondack Cottage Sanatorium, Trudeau, New York (1885):

"First purchase \$25 an acre, last purchase \$1,000 an acre. Land within our gates sold to us for \$1,000 an acre."

From Montgomery E. Leary, M.D., Superintendent, Monroe County Hospital, Rochester, New York (1910):

"Believe land has increased. A considerable number of new dwelling-houses have been erected in the immediate vicinity since the institution was started."

From Harry Lee Barnes, M.D., Rhode Island State Sanatorium, Wallum Lake, R. I. (1905):

"Land at least double what it was before sanatorium was erected."

From Henry D. Chadwick, Superintendent, Westfield State Sanatorium, Westfield, Mass. (1910):

"25 per cent. to 30 per cent. increase. Two adjoining farms during the past two years have sold for considerable advance over preceding sales."

No Danger of Infection Spreading

The most frequent objection to the proposed location of a hospital is that it will be a menace to the health of the neighboring inhabitants. The following interesting comments on this point are in answer to a question asking directly if the correspondents had ever known of any case of infection resulting from the presence of the sanatorium:

From F. M. Pottenger, M.D., Medical Director of the Pottenger Sanatorium, Monrovia, Calif.:

"I do not. The sanatorium patient is the best educated of all. He learns in the sanatorium, from seeing the care that is taken, what care he himself

should take; and even the most careless have this drilled into them to such an extent that they will be more careful than they would otherwise be, without such training. I consider a well-conducted sanatorium the least dangerous of all places for people to live. It is far less dangerous than the average hotel or boarding house."

No better testimony as to the safety of an institution could be found than in the attitude of life insurance companies as indicated in the remarks of H. V. Pettit, M.D., Superintendent of the Ottawa Tuberculosis Colony, Ottawa, Ill.*

"As far as I know there have been no cases of tuberculosis which have resulted from residence in or near this institution. In fact, there have been several of our officers who have taken out life insurance with one of the most conservative companies in this country and have been advised by the life insurance company that, other things being equal, their risk is better than that of the average person."

From Martin F. Sloan, M.D., Superintendent of Eudowood Sanatorium, Towson, Md.

"I believe the wide spread fear of tuberculosis patients and institutions to be not only unjust but unfounded. The public should be willing to believe that sanatorium directors fully appreciate the gravity of the situation and therefore do every thing to minimize contagion. They should also know that 80 per cent. of those having tuberculosis and knowing it, will exercise prophylaxis. It is the person who has the undiagnosed tuberculosis lesion that is to be feared."

From Montgomery E. Leary, M.D., Superintendent of the Monroe County Hospital, Rochester, N. Y.:

"A well-conducted sanatorium is the safest place to live in. You know what you have; on the outside you do not know who you are meeting or what they are doing. With properly educated patients and rules which are enforced, there are more dangers on the street than in the sanatorium."

From Edward L. Trudeau, M.D., Medical Director, Adirondack Cottage Sanitarium, the first of its kind in America, opened in 1884:

"If employees don't develop the disease while in the institution, how could the sanatorium possibly endanger anyone outside of its gates. To my knowledge, no healthy employee has developed the disease while in our institution."

From J. W. Coon, M.D., Superintendent of the State Sanatorium, Wales, Wis.:

"It may be worthy of note that among the two hundred persons who have been employed at the sanatorium since its opening, by far the larger proportion of whom were young men and women, at the most susceptible age for contracting tuberculosis, not one, so far as I am aware, has ever developed tuberculosis, although one or two had already contracted it before coming to the institution. It seems to me this speaks well for the care exercised in preventing the spread of the disease from the institution."

* See page 36.

From Guy L. Kiefer, M.D., Health Officer of Detroit, Mich.:

"I am sure that our sanatorium has had no ill effect on the health upon the immediate surrounding community and I am equally sure all the property surrounding our hospital has advanced in value."

Opposition Does Not Last

That the chief opposition to a hospital will die out after it has been established and the people understand its functions is amply attested by the following quotations:

From Robert A. Peers, M.D., Medical Director, Colfax School and Hospital for the Tuberculous, Colfax, California (1908):

"When we first commenced our work here, there was a good deal of opposition and it was even made a political issue, but now people try to secure patients and their families as tenants and as a result many new houses have been built that would not otherwise have been erected. Directly and indirectly the town, which has about 750 steady inhabitants, profits to the extent of several hundred dollars a month and there has been no mortality or morbidity amongst the local inhabitants. In the fourteen years I have been here, but two of the townspeople have died from tuberculosis."

From Ralph H. Hunt, M.D., Day Camp Anti-Tuberculosis League, Orange, N. J. (1909):

"At the time of the establishment of our camp, there was very marked objection to it on the part of the neighbors, which was so acute that it took the form of an injunction. We, however, beat the injunction.* Since that time the whole attitude of the neighbors has changed, and many of them are good friends today, and so far as I know at the present time there is no objection at all."

From Charles S. Millet, M.D., Medical Director, Millet Memorial Hospital, East Bridgewater, Mass. (1900):

"There was considerable opposition among the neighbors to the sanatorium when it was first established, on account of their fears, but that has long since disappeared."

Herbert Maxon King, M.D., Loomis Sanatorium, Liberty, New York (1896), testifies that in spite of initial opposition, property surrounding the hospital has increased in value and that the institution has had a beneficial effect, and sums up his remarks thus:

"I am, of course, a prejudiced party to such an inquiry, but my statements have been acceded to by business men, railway officers, local residents, etc., in this vicinity, notwithstanding many bitter attacks upon the sanatorium in times past."

* See page 41.

From Isaac W. Brewer, M.D., Superintendent of the Tompkins County Tuberculosis Hospital, Ithaca, N. Y. (1913):

"There has been considerable opposition to the establishment of sanatoria for the treatment of tuberculosis, on the grounds that the value of the local property will be depressed. When this site was chosen, there was the usual objection. However, that seems to have passed away for during the past three months both of the farms that adjoin the sanatorium have been sold. The one directly opposite the buildings, a fruit farm, sold for \$200 per acre, and the one that adjoins us on the south sold for \$4,500, and would have brought \$5,000 but for a matter of personal feeling between certain persons. All those who live in this community believe that both farms brought all that they were worth."

"The secretary of one of the largest real estate companies in Ithaca informs me that he does not think the sanatorium has in any way changed the values of the land in its vicinity."

Hospitals Benefit Health of Neighbors

A few answers to the question "*Has your institution had any beneficial effect upon the health of those living near it by educating them to open their windows, etc.*" may well be included.

From John C. King, M.D., Superintendent of Dr. King's Sanatorium, Banning, California:

"The beneficent sleeping-porch fad has become general in the town."

From Henry D. Chadwick, M.D., Superintendent, Westfield State Sanatorium, Westfield, Massachusetts:

"I am sure that it has. Many new dwelling houses are adding sleeping porches and outdoor sleeping is becoming quite common."

From Theodore B. Sachs, M.D., Edward Sanatorium, Naperville, Ill.:

"Less indiscriminate expectation in public places. Windows kept open at night in the majority of residences. Residences built with sleeping porches. I believe that the nearness of a tuberculosis sanatorium to a community has a beneficial effect upon the standard of health of said community as well as a tendency to increase the value of surrounding property."

From Thomas N. Hay, M.D., River Pines Sanatorium, Stevens Point, Wisconsin:

"Yes, a large number of sleeping porches have been built in the town."

An Exception

The following statement by W. M. Mills, M.D., formerly Medical Director of the Camp of the Topeka (Kansas) Association for the Study and Prevention of Tuberculosis gives the only experience of the kind out of the eighty-four institutions.

The small temporary camp, located in a growing section of the city, was already in operation when some question of administration aroused opposition. To quote Dr. Mills:

"We have been compelled to abandon our camp on account of pressure brought to bear by neighboring property owners on the owner of the land we lease. They think that their property values would have increased if we had not been near them. Property owners say that property around the camp, which was in a 'fairly well settled' section, had not decreased in value but became more difficult to sell."

CHAPTER III

Assessed Property Values Around Five Institutions

In order to verify as accurately as possible existing information with regard to the effect of a tuberculosis hospital upon the value and desirability of surrounding property, as summarized in preceding chapters, a first-hand investigation was made of five institutions which seem to be typically located in relation to city, village, or farming district, for the particular purpose of studying assessed valuation and special factors affecting the problem.* Of the five hospitals considered, one was located within limits of a large city; one just within limits of a city of 85,000; one just outside the limits of a city of 35,000; one on the outskirts of a village of 300; and one in a farming district 2½ miles from a village of 8,000.

Information in each case was collected covering the following points:

- (1) The change in assessed valuation of surrounding property after the locating of a hospital;
- (2) Actual sales of surrounding property;
- (3) Expressed feeling of nearby property owners; and
- (4) Expressed feeling of general public.

Each hospital will be considered where information is available individually under these four heads:

I. HOSPITAL WITHIN LIMITS OF LARGE CITY

Seton Hospital, New York City.

This semi-charitable hospital, located within the limits of New York City and opened in 1894, accommodates 375 men, women and children, largely indigent, and chiefly in the advanced

* The investigations noted in this chapter were made for the National Association by Dixon Van Blarcom, Field Secretary.

stages of the disease. The grounds comprise a city block in the centre of a high class residential section. Roads have been cut through part of the section and part still remains wooded. The hospital is situated on a ridge which slopes on the one hand to the Hudson River and on the other to a more thickly settled portion of the city. Real estate firms and individuals have improved their holdings with privately built roads and sewers. The whole crest of the ridge is not immediately accessible by public transportation facilities and since property owners have opposed the building of a street car line through the section, the property has been acquired and is being built up by the more well-to-do class. Many fine homes have been built in the direction of the river and to the south of the hospital. There are also a number of residences to the north.

The main building of the hospital is located within 200 feet and in full view of the street which runs along the crest of the hill. The hospital was erected when surrounding property was comparatively cheap and the neighborhood sparsely settled. The property has increased enormously in value and has become more and more desirable for residences which are being gradually built.

1. Assessed Valuation*

Since 1900 (the earliest figures obtained) adjoining and nearby property has increased from two to six times in assessed valuation. The hospital was given as the reason in the applications for reductions of assessed valuation recently by the owners of two or three small parcels of land directly across the street from the hospital. It will be noted from the figures of one of these parcels given in the following table that the decrease in assessment was preceded by a marked increase, which is typical of other surrounding property:

Year.....	1900	1905	1910	1913
Valuation.....	\$2,200	\$5,500	\$8,500	\$7,000

A county official's comment on these applications was: "Any excuse is sufficient grounds upon which to base an application for a reduction in assessment."

An examination of the tables in the Appendix will show that an occasional property some distance from the hospital has

decreased in assessed valuation after a remarkable increase, so that no importance can be attached to similar changes in adjoining property.

2. Actual Sales

The sales have not been numerous, because as one man, whose father lives within a block of the hospital, expressed it, "The people who own property there would not sell at any price." And again, some large tracts belong to old estates and other owners have built homes in which they now live. One residence recently constructed within 200 or 300 feet of the hospital has remained unrented for about four months because prospective occupants object that it is too near the hospital. It had been occupied by a man who left, not because of the hospital, but for an extended trip in Europe. A member of the real estate firm which controls the house says that this is the only instance of the kind of which he knows. It is one of the two or three homes which are so close to the hospital that the coughing of patients is sometimes audible in summer.

3. Feeling of Property Owners

The head of one realty company with considerable interest in nearby property, gave the impression that the hospital has some undesirable influence upon the immediately adjoining property, but that it probably does not extend any considerable distance from the grounds.

In 1910, Mr. B built a fine new home about 200 yards from the hospital. He has no objection except to the appearance of an unkempt incinerator on the grounds.

Mr. C lives in a home just beyond Mr. B and owns some property in the vicinity. He does not object to the hospital but believes it affects somewhat the value and chances of sale of adjoining property. Mr. D, who lives in the vicinity and holds considerable property, believes the hospital has some depreciating effect but cannot say how much.

Mr. E in 1910 built a new home nearer the hospital by the width of the street than Mr. B, after he had lived in a rented house on the hill for a year. The building of a home so near the hospital by this intelligent lawyer after he had lived in the

* See Appendix, page 54, for tables giving detailed figures.

neighborhood long enough to become thoroughly familiar with the situation is the best possible comment on the effect of the hospital on the desirability of surrounding property.

4. Feeling of General Public

Little opportunity was had for obtaining general sentiment, but those interviewed at random expressed friendly feelings. The tax assessor said that the hospital was taken into consideration in fixing the assessments of adjoining property.

II. HOSPITAL WITHIN CITY OF 85,000

Sprain Ridge Hospital, Yonkers, New York.

This semi-charitable and splendidly equipped hospital, located in a sparsely settled section within the limits of a city of 85,000 population, was opened in 1908 with a capacity for twenty-five incipient cases, who are charged a nominal rate for treatment. The buildings are set some distance back from the road and are visible from a few points only. Adjoining the property is a cemetery which property owners say depreciates the value of all land in the neighborhood.

1. Assessed Valuation *

Both the adjoining and nearby property has increased steadily in assessed valuation since the hospital was erected. The adjoining property increased fifty-seven per cent. from 1907 to 1914. Property not adjoining the hospital grounds, but in the immediate vicinity increased fifty-one per cent. during the same period.

2. Active Sales

Several adjoining and nearby tracts have changed hands or have been divided into building lots which are now on the market. One adjoining plot of over 200 acres was bought in 1905 at about \$500 per acre and in 1910, thirty-three acres of it were sold for about \$2,000 an acre. One part of an adjoining property of forty-five acres, which cost \$800 an acre in 1911, has been cut up into one-quarter acre lots and sold at the rate of \$2,000 to \$2,800 an acre. Seventy one-quarter acre lots

* See Appendix, page 56, for detailed figures.

nearby have brought from \$250 to \$500 each in the past five years. Thirty new homes valued at from \$8,000 to \$15,000 each, including the lots, have been erected in the past two years on one plot three-quarters of a mile from the hospital grounds. These transactions are typical of the activity of both adjoining and nearby property.

3. Feeling of Property Owners

Owners of adjoining and nearby property are nearly unanimous in stating that the hospital has very little if any effect upon their property. The owners of fifty acres adjoining did not mention the hospital as a reason in their application for a reduction of assessed valuation in 1913. Both owners said they thought the hospital had no effect.

The owner of a thirty-eight acre adjoining plot recently gave the cemetery, water works and hospital, all of which adjoin him, as reasons for a reduction in assessed valuation.

Another man owning a large tract across the road from the hospital said it has not had any serious effect. The owner of eighteen acres adjoining made favorable comment upon the improvement of the hospital tract with the coming of the institution.

III. HOSPITAL WITHIN HALF-MILE OF CITY OF 35,000

Bowne Memorial Hospital, Poughkeepsie, New York.

This is a public hospital, built as a memorial and given to the county, with accommodations for seventy-five adults in all stages of the disease and twenty-five children. It is located one-half mile outside the limits of the city of Poughkeepsie. The buildings are on an eminence about one hundred yards from one of two crossing highways and about one hundred feet from the other and in full view from both of them. Property toward the city is built up here and there with homes chiefly of working men, while on the other side it is divided into small farms. A camp opened upon the site in January, 1910, gave way to permanent hospital buildings in 1911, which were enlarged in 1913.

1. Assessed Valuation

The assessed valuation of the surrounding property rose uniformly from 1908 to 1912, as is indicated in the tables shown in the appendix.*

2. Actual Sales

There have been few changes in ownership of surrounding property since the institution was opened as the owners do not seem desirous of selling.

Mr. A recently refused \$3,500 for a four-acre plot now adjoining the hospital grounds and for which he paid about \$2,000 before the hospital was built. Mr. B lately declined an offer of \$20,000 for eighty acres of adjoining property assessed at \$6,600. Mr. C recently refused \$30,000 for forty-one acres located one-quarter of a mile from the hospital in the direction of the city and assessed for \$10,000.

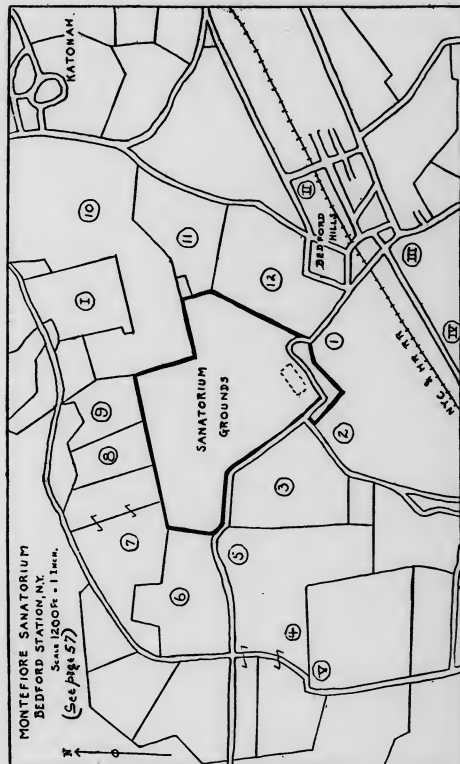
3. Feeling of Property Owners

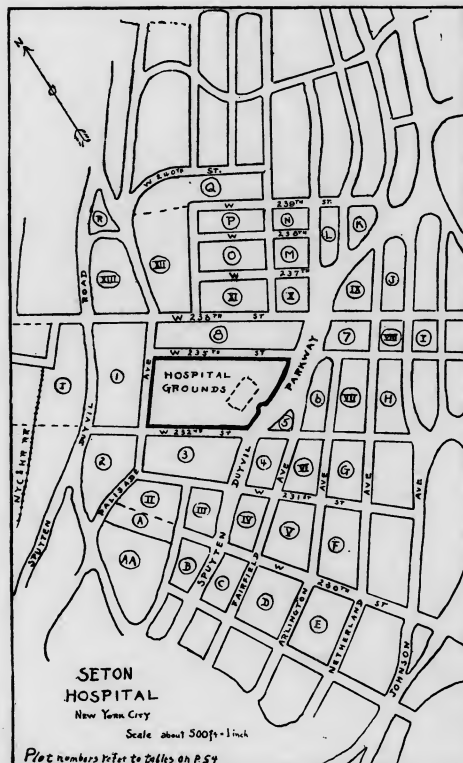
One man owning eighty acres across the road from the hospital thought that it made no difference whatever. However, a man owning twelve acres across the road in another direction claims that the hospital injures his property and strongly disapproves of its location. The owner of a small plot about one-quarter of a mile from the hospital stated that a prospective buyer objected to the hospital on the grounds that it would be a danger to her child. He further stated, however, that he knew there was no danger and had no complaint to make, but was in entire sympathy with the hospital. The head of one improvement company with large tracts one-quarter of a mile from the hospital said that he was sure it made no difference whatever. The other property owners interviewed agreed that the hospital is no detriment.

4. Feeling of General Public

One county official was of the opinion that the hospital affected immediately adjoining property to some extent. Other opinions obtained were favorable.

* See Appendix, page 56, for detailed figures.





IV. HOSPITAL NEAR VILLAGE OF 300

Montefiore Home Country Sanatorium, Bedford Station, New York.

This Jewish charitable hospital of 170 capacity primarily for incipient cases, is located upon a hill overlooking a village of 300 population. The institution is one-half mile from the railroad station and some thirty miles from New York City, from which practically all of its patients come. The village lies on one side of the sanatorium, while on the other three sides the land, which is of rough, hilly formation, is occupied by a few country homes and a number of somewhat unproductive farms. The buildings of the institution are located in full view of the highway.

1. Assessed Valuation

Since 1903, the adjoining and nearby property has increased in assessed valuation at a rate normal for its type. It will be noted that the assessment figures* do not date from the opening of the hospital, 1897, but from a period several years later. The rise in assessed valuation does not seem to have kept pace with the increase in estimated value of the property or with the increase as indicated by sales.

2. Actual Sales

While a large amount of surrounding property belongs to old estates and is not for sale, land which has been sold has brought an increase over the purchase price, and in some instances a marked increase.

One plot of seventy-six acres adjoining the hospital was purchased for \$12,500 after the hospital was erected and sold shortly afterward for \$22,000. Three parcels of nearby property which was purchased ten years ago for \$18,000 were sold recently for \$73,000. Three parcels remain. Mr. X claims that his eighty-five acres of adjoining property bought about thirty years ago for \$10,000 is now worth \$40,000.

Mr. C values at \$18,000 eighty acres of adjoining property for which he paid \$9,000. One owner values at \$70,000 one hundred and forty acres of adjoining land for which he paid

* See Appendix, page 57, for detailed figures.

\$35,000. Another owner questions if he would now take \$400 an acre for seventy acres of adjoining property for which he paid about \$75 an acre a few years ago.

The property of a real estate development company one-half mile from the hospital which cost \$16,000 ten years ago is now valued at about \$60,000.

3. Feeling of Property Owners

While property owners were somewhat divided in their opinions as to the effect of the hospital upon the surrounding property, the majority were firm in believing that it has no material effect. For example, one owner of adjoining property believes the hospital has an undesirable effect and says he is anxious to sell; another expressed the wish that it be removed from the locality; while the owner of 130 acres adjoining held that the hospital had very little if any effect; and another said it had none at all.

4. Feeling of General Public

The attitude of the villagers is friendly with a few exceptions in which the feeling of opposition is in no sense bitter or strong. The type of friends of the patients, who visit patients at the hospital, and their actions in the village, were the chief target for such criticisms and objections as were offered by both property owners and villagers. This is a situation which would probably not be duplicated in any other part of the country, owing to the fact that the sanatorium population is largely Jewish, from congested portions of New York, and the visitors are of a similar descent.

V. HOSPITAL LOCATED IN FARMING DISTRICT

Gaylord Farm Sanatorium, Wallingford, Conn.

This semi-charitable institution strictly for incipient cases, is located in the country about two and one-half miles from a village of 8,000 inhabitants and a few miles from New Haven. Patients are charged a nominal rate and the deficit is made up by private subscriptions and state subsidy. The buildings are one-eighth of a mile back from the road and in full view from it. Possible future complaints are eliminated by the fact that the

hospital owns the property across the highway. Small farms and wooded land comprise the adjoining and nearby property.

1. Assessed Valuation *

The largest part of the surrounding property shows an increase in assessed valuation from 1903, the year before the institution was opened, to 1913. The unchanged assessment of a few parcels of land is not unusual for this type of property, which increases in value slowly and at infrequent intervals.

2. Actual Sales

Little of the property in the neighborhood has changed hands in the past few years with the exception of that bought up at times by the hospital.

An adjoining farm which cost \$25 an acre the year before the hospital opened brought \$50 an acre six years later. Sixty acres of nearby property assessed for \$1,797 was sold for \$2,900 two years ago. Recently a property within a mile of the hospital assessed at \$7,788 was sold for \$9,000.

3. Feeling of Property Owners

The property owners interviewed did not feel that the hospital had a detrimental effect upon their property nor did they feel that it was undesirable.

4. Feeling of General Public

It is worthy of note that the feeling in the village seemed to be entirely friendly. The institution was frequently referred to with some pride. This friendly feeling may be due in some degree to the fact that the hospital, partly with its own money, has made improvements in nearby highways. The institution doubtless helps also to relieve the loneliness of the district.

* See Appendix, page 58 for detailed figures.

CHAPTER IV

Typical Laws and Ordinances Covering the Approval and Restriction of Hospital Sites

The rapid increase in the number of hospitals and sanatoria, particularly in New York and New Jersey, combined with a constant succession of local conflicts over the location of such institutions has led several states and a number of cities to enact legislation bearing on this problem. The laws of New York and New Jersey are the most comprehensive and suggestive ones on this subject, and on this account are given in full.* As most of the restrictive ordinances are similar in general form only one of them is given in full.

New York

The New York State law covering the approval of sites for tuberculosis hospitals was enacted in 1909, after a vain attempt had been made to secure a site for a sanatorium on Long Island under then existing legislation. As a result of this law, this sanatorium and many others have been established without recourse to the somewhat burdensome machinery of the courts. The law provides: (1) that the State Commissioner of Health and the health officer of the locality in which it is proposed to locate the institution shall sit as judges at a previously advertised public hearing on the question and render a decision within thirty days; and (2) that if they are unable to agree, an appeal may be made to a committee comprised of the State Commissioner of Health, the Lieutenant Governor and the Speaker of the Assembly, who constitute a final court for the decision of matters pertaining to the location of tuberculosis hospitals and sanatoria.

The text of the law, which is Section 319 of Chapter 49 of the Consolidated Laws of 1909, follows:

* Rhode Island also has a special law passed in 1909, dealing with this problem.

Section 319. *Consents requisite to the establishments of hospitals or camps for the treatment of pulmonary tuberculosis.*—A hospital, camp or other establishment for the treatment of patients suffering from the disease known as pulmonary tuberculosis, shall not be established in any town by any person, association, corporation or municipality except when authorized as provided by this section. The person, association, corporation or municipality proposing to establish such a hospital, camp or other establishment shall file with the state commissioner of health a petition describing the character thereof, stating the county and town in which it is to be located and describing the site in such town for such proposed hospital, camp or other establishment, and requesting the commissioner to fix a date and place for a hearing on such petition before the state commissioner of health and the local health officer, who shall constitute a board to approve or disapprove the establishment of such hospital, camp or other establishment in accordance with such petition. The state commissioner of health shall fix a date and place for a hearing on such petition, which date shall be not less than thirty nor more than forty days after the receipt thereof. A notice of such hearing specifying the date and place thereof and briefly describing the proposed site for such hospital, camp or other establishment shall be mailed to the person, association, corporation or municipality proposing to establish the same and to the health officer and each member of the board of health of the town in which it is proposed to establish such hospital, camp or other establishment at least twenty days before the hearing, and also publish twice in a local newspaper of the town, or if there is no such paper published there, then in the newspapers of the county designated in pursuance of law to publish the session laws. At the time and place fixed for such hearing the state commissioner of health and the local health officer shall hear the petitioner and any person who desires to be heard in reference to the location of such hospital, camp or other establishment, and they shall within thirty days after the hearing, if they are able to agree, approve or disapprove of the location thereof and shall notify the person, association, corporation or municipality of their determination. The determination of the state commissioner of health and local health officer shall be final and conclusive; but if within thirty days after the hearing they are unable to agree, they shall within such thirty days notify the person, association, corporation or municipality, proposing to establish such hospital, camp or other establishment that they are unable to agree. Within ten days after the receipt of such notice, such person, association, corporation or municipality may file in the office of the state commissioner of health a request that the petition be referred to a board consisting of the lieutenant-governor, the speaker of the assembly and the state commissioner of health. Such officers shall approve or disapprove of the proposed location of such hospital, camp or other establishment after a hearing of which notice shall be mailed to the person, association, corporation or municipality proposing to establish the same and to the health officer and to each member of the board of health of the town, or without a hearing, upon the evidence, papers and documents filed with the state commissioner of health or that may be submitted to them, as the board shall determine. They shall make their determination within thirty days after the request for such submission has been filed in the office of the state commissioner of health and cause a copy thereof to be mailed to the person, association, corporation or municipality proposing to establish such hospital, camp or other establishment and to the health officer of the town in which it is proposed to establish the same. Such determination shall be final and conclusive.

New Jersey

The New Jersey law is significant in that it provides for a somewhat simpler procedure. The State Board of Health is

the only and final court for the decision of questions relating to tuberculosis institutions. The text of the law, which is contained in Chapter 88 of the laws of 1910, follows:

1. Hereafter no person or persons, corporation or association shall locate, construct or establish in any city, town, borough, township or other municipality of this State any hospital, sanatorium, preventorium or other institution to be used for the care, board or treatment of any person or persons afflicted with the disease known as pulmonary tuberculosis, without first obtaining the consent and approval of the State Board of Health so to do.

2. All applications under this act shall be made to the State Board of Health in writing, signed by the applicant, shall give the name of the city, town, borough, township or other municipality in which it is proposed to locate the same, and shall be accompanied with a descriptive map of the premises proposed to be devoted to the uses authorized by this act.

3. The State Board of Health shall fix a time and place for the hearing on such application, of which hearing the applicant shall give at least two weeks' notice in some newspaper published and circulating in the municipality named in the application, and if none be published therein, then by posting in such municipality at least ten notices for fifteen days before such hearing, giving notice of such application.

4. At the time and place so fixed for said hearing the State Board of Health shall hear all parties, both for and against said application, and said board shall thereupon either grant or withhold the consent and approval asked for.

5. After the passage of this act the State Board of Health shall have the sole authority to grant or refuse the consent and approval to the erection, construction, and establishing of any and all hospitals, sanatoria, preventoria, or other institutions designed for the care, board or treatment of any person or persons afflicted with the disease known as pulmonary tuberculosis.

6. After the passage of this act no consent shall be required from any officer or board of the State of New Jersey or any of the municipalities thereof, except the State Board of Health as aforesaid, to the erection, construction or establishment of any of the institutions aforesaid, or to the bringing of persons to such institutions from points within or without the State.

7. This act shall not be construed to require any of the institutions aforesaid which may have been used prior to the passage of this act during the summer only to obtain any consent or approval for reopening said institutions from year to year as heretofore.

Restrictive Ordinances

In July, 1911, the City Trustees of South Pasadena, California, passed an ordinance forbidding the establishment within the city of any sanatorium, asylum or retreat where consumptives are received or treated under penalty of \$300 and three months in jail. The ordinance is typical of similar attempts to restrict the establishment of hospitals and sanatoria by local regulation. Whenever these ordinances have been tested in court, as in Richmond, Virginia, and Redlands, California, they have been held to be unconstitutional. The text of a typical ordinance adopted in Redlands, California, in 1910, and later declared null and void by the courts, is given in full:*

* See page 43.

Section I. Every hospital, sanitarium, pest house, asylum or other place maintained or conducted for the purpose of caring for or treating persons afflicted with any contagious or infectious disease, for or without reward or charge, located within four hundred (400) feet of the dwelling of another person, or within two thousand six hundred forty (2640) feet of a school house or within thirteen hundred twenty (1320) feet of a flowing stream of water, water ditch or open water conduit from which water for domestic purposes is taken, is hereby declared to be a menace to the public health and safety, and a public nuisance, and shall be abated by civil action brought in the proper court.

Section II. Provides that violation of the foregoing is a misdemeanor, punishable by a fine of not more than \$500, or imprisonment in the county jail not exceeding six months, or by both such fine and imprisonment.

CHAPTER V

Some Opinions of Value

Opposition to the location of hospitals and sanatoria at various times has called forth published opinions from a number of eminent men in different parts of the country. The few quotations chosen have been selected primarily because they accurately sum up the situation. Letters from five of the largest life insurance companies in the country expressing their attitude on the question of the danger of infection spreading from a hospital, and the opinions of health officers who have been asked to decide questions of location of sanatoria are also included in this chapter.

Dr. E. L. Trudeau

The selection of a site for the Onondaga County (N. Y.) Tuberculosis Hospital raised opposition which was overcome with difficulty. In connection with this controversy the Syracuse, N. Y., Journal, on March 1, 1913, published a letter from Dr. Edward L. Trudeau, the pioneer of the open air treatment of tuberculosis in America, and the founder of the first tuberculosis sanatorium in America, in which he said in part:

"When I bought the first land on which the Adirondack Cottage Sanatorium is built (in 1885) I paid \$25 an acre for it, because it was a small piece and a selected site, but the price was then thought absurdly high. Every time I have purchased more land the price has risen steadily and my last purchase of five acres cost me \$5,000. Meanwhile the village of Saranac Lake, whose limits were nearly a mile away from the sanatorium, has steadily crept up toward the institution, until now private residences are built at its very gates and rent and sell for prices which are far in excess of similar properties in small towns elsewhere. Of course we doctors know that the idea of a sanatorium's being any danger to the community in which it is located is simply absurd and that, on the contrary, the education which comes from its walls, is an immense protection to the neighborhood. Tuberculosis is a communicable disease under certain conditions, but it is not at all like any of the highly infectious diseases, such as smallpox, measles, etc. It is a disease where any danger of infection is within doors, and even this, with the simplest precautions, can be obviated. To my knowledge there has never been an employee who came to the Adirondack Cottage Sanatorium in sound health who developed tuberculosis while there; and a sana-

torium can no more endanger the health of the neighborhood in which it is built, even if the residences are at its very gates, than it could if it were placed on top of a high mountain, miles away from habitation."

Hamilton W. Mabie

In reply to those opposing the location of a tuberculosis hospital at Summit, New Jersey, several years ago, Hamilton W. Mabie, the well-known journalist, wrote a long letter published in the Summit Herald, November 27, 1909, taking up the question from a slightly different angle. One of the principal objections to the hospital was that it would advertise the fact that there is an undue amount of tuberculosis in Summit, and would thus injure property. Quoting from his letter:

"Not only is a sanatorium for tubercular patients a distinct aid to the healthfulness of a community, but it is also a distinct addition to property values. This will probably strike many people as an unwarranted statement, but the trouble with this matter is that antiquated ideas and unfounded impressions still prevail among those who have not made some study of the subject. It is a matter of history that communities in which sanitariums are established have experienced a rise in values in consequence. If this matter were thoroughly discussed, I am sure that both the Board of Trade and the town would take a very different attitude toward the possibility of introducing a sanatorium here. It would be as logical to hold that the Overlook Hospital (a general hospital) is an injury to the town because it advertises the fact that there are accidents and sickness here, as to hold that a sanatorium for tubercular patients would advertise the fact that there is danger of tubercular trouble here. As a matter of fact, the presence of such a sanatorium would advertise the extreme healthfulness of this locality. That has always been the special claim of Summit on people looking for homes, and the more widely the impression can go abroad the greater will be its prosperity.

This question ought not to be left without a word about its higher aspects. Summit cannot afford to settle such a question as this on business grounds alone. There are other things in life besides real estate, and a community cannot have a better asset than the reputation for large-hearted generosity and courage. Everyone respects a community which, when an infectious disease breaks out, does not conceal the fact, but pursues a policy of complete publicity. Courage is always the best policy, and so is generosity. No one can forget the contempt and indignation which was aroused by the refusal of a few settlers on Fire Island to allow women and children who had come from Europe on a steamer in which there was two or three cases of cholera to land and take temporary shelter, but sent them back to an excursion boat lying in the open sea, with the possibility of bad weather."

Dr. E. M. Mason

During 1911, objection to the location of the Red Mountain Tuberculosis Camp at Birmingham, Ala., called forth an open letter from Dr. E. M. Mason of that city. Some of his well stated comments accurately sum up the situation:

"Patients are taught the nature of the disease which they have to combat, and soon learn the precautions that must be observed to prevent reinfection of themselves as well as transmission of the disease. Tuberculosis cannot

arise *de novo*, nor can one contract it as one would contract, for instance, smallpox, by mere proximity to a patient. One can only acquire the tuberculosis germ from the excreta of a patient, chiefly sputum. If these be destroyed, there can be no tuberculosis. It is axiomatic that if every tubercle bacillus could be killed there would never be another case of consumption.

"At the camp we are enabling patients to throw off the infection already existing and are destroying all infected matter from each patient. Therefore, no tuberculosis can be disseminated from the camp nor from any other properly regulated institution for its treatment. So true is this, that no well-informed person would deny that the citizens would be in less danger of contracting this disease if our camp occupied the most central business block of the city than they are as the conditions now exist in this and every other city. Every properly isolated case of tuberculosis ceases to be a menace to the community, while every recognized, uncontrolled, infected individual casts off daily in his excreta millions of tuberculous germs.

"Every broad-minded humanitarian movement in the history of the world has been opposed by ignorance and prejudice; the effect to control tuberculosis can hope for no exemption; but our cause is good, our work is based on a scientific study of the disease, and the results obtained speak for themselves.

California Association

Opposition to the location of a tuberculosis hospital in Mentone, California, within a certain distance of residences, a school-house, and other buildings, elicited the following well stated resolutions from the California Association for the Study and Prevention of Tuberculosis:

"RESOLVED, That it is the sense of the members of the Executive Board of the California Association for the Study and Prevention of Tuberculosis, that those who attempt to prevent the establishment of properly conducted sanatoria, are not only in opposition to scientific facts, but that such persons are sacrificing human life on the altar of supposed material prosperity, (although it has been shown that property values in the neighborhood of properly conducted sanatoria really increase in value); and be it further

"RESOLVED, That this Executive Board deprecates the unwise action of all such persons as being unscientific, inhumanitarian and illogical; and that all persons who will really study this question must come to the conclusion that the action of such persons is nothing else than an expression of tuberculo-phobia, and to that extent a menace to the great movement now in progress, which has as its end, the doing away with tuberculosis as a scourge to the human race."

Opinions of Life Insurance Companies*

In March, 1914, The National Association for the Study and Prevention of Tuberculosis addressed communications to five of the largest life insurance companies in the country, requesting answers to the following questions:

1. Is residence or employment in a tuberculosis hospital, sanatorium or dispensary counted as an adverse factor in

*See remarks of Dr. Pettit, page 17.

considering the issuance of a life insurance policy to a doctor, nurse, attendant or other employee of such institution, who upon examination is non-tuberculous?*

2. Is residence in the neighborhood of such an institution as above mentioned considered as an adverse factor in issuing a policy to a non-tuberculous applicant?

Two of the companies answered the first question in the negative and two in the affirmative, while one indicated an affirmative attitude, though not stating definitely. The answers to the second question were unanimously in the negative.

It should hardly be necessary to say that life insurance companies would have most rigid and conservative ideas as to what is and what is not an adverse factor in issuing a policy. Their error, if any, would certainly be on the side of conservatism. That they do not consider residence near a tuberculosis sanatorium as an adverse factor must quiet the fears of reasonable men and women who have believed a danger existed or might exist from the presence of such an institution. The fact that some companies look with a degree of suspicion upon employees of tuberculosis institutions, in the light of so much testimony supporting an opposite opinion, indicates their extreme carefulness and accordingly gives additional support to their conviction that residence near a tuberculosis institution is not an adverse factor.

To emphasize this point, the answers to the questions, giving the name of the company except where it has been requested to withhold it, are given below:

From Arthur B. Wright, M.D., Medical Director of The Travelers' Insurance Company, Hartford, Connecticut:

".....This Company has not modified in any way the form of policy issued to a doctor, nurse, attendant or other employee of a tuberculosis hospital or sanitarium provided examination is first class in every other respect, the assumption being that such employee would be in better position to follow out principles of precaution than others. Our experience with this class of risks has been very favorable.

"In regard to Question 2 would state that we do not consider as an adverse factor residence in the neighborhood of such an institution. The same principle would prevail as regards this feature, inasmuch as proper precautions would be followed by the institution itself."

* A recent report by Dr. Hamel, published in the Medico-Statistical Contributions of the Imperial Health Office of Germany, gives the results of an investigation into the incidence of tuberculosis among physicians and nurses employed in German sanatoria and hospitals. Dr. Hamel's report, which embraces 549 institutions and clinics, 2,861 physicians and 14,140 nurses of all types, shows that the rate of infection among these healthy employees of tuberculosis sanatoria and hospitals is no larger and is even slightly less than a similar rate recognized by insurance companies for New York City.

From Dr. Lee K. Frankel, Sixth Vice-President of the Metropolitan Life Insurance Company of New York City:

".....Referring to the two questions asked I can answer these only as far as the Metropolitan Life Insurance Company is concerned.

"1. Residence or employment in a tuberculosis hospital, etc., is not counted as an adverse factor in considering the issuance of a life insurance policy to a doctor, nurse, etc.

"2. Residence in the neighborhood of a sanatorium is not considered an adverse factor in issuing a policy to a non-tuberculosis applicant."

From a high official of a company which does not wish its name used in connection with this report:

"Applicants for insurance who reside near or are employed in a tuberculosis hospital, sanatorium, or dispensary, are considered on their individual merits. Of course, no applicants are accepted for insurance who on examination are found to be tuberculous. The practice regarding the acceptance of applicants of this class varies according to local circumstances. The possible risk of tuberculous infection is carefully taken into account.

"The results of the German Collective Sanatoria Experience establishing for employees a varying degree of liability to infection, are evidently suggestive of an extra risk, which it would not be proper for us to ignore.

"Residence in the neighborhood of tuberculosis hospitals or sanatoria is not considered an adverse factor in the issuing of a policy to a non-tuberculous applicant. There is no evidence to prove that the disease is spread by infection from a well managed institution to the population of the surrounding community, but, of course, there is a certain degree of risk in the case of indirect treatment of tuberculous patients in boarding-houses or private homes, not under proper medical supervision and control. All of the American life insurance companies transact business without discrimination in localities which for climatic or other reasons are particularly suitable for the treatment of tuberculosis patients, and as far as known, they have not experienced an appreciably higher mortality from tuberculosis among their policyholders living in such localities when compared with those living elsewhere."

From F. C. Wells, Senior Medical Director of The Equitable Life Assurance Society of the United States, New York City:

".....I beg to say that, first—we look with much suspicion and disfavor upon any doctor, nurse, attendant or other employee who is spending his time in a tubercular hospital. Second, we cannot see how residents in the neighborhood of such an institution as a tuberculosis hospital would be an adverse factor in issuing policies to non-tubercular applicants, provided they do not come in contact with the disease in any form."

From the Medical Director of a company which does not wish its name used in connection with this report:

"1. Residence or employment in a tuberculosis hospital, sanatorium or dispensary would be regarded as an adverse factor in considering the issuance of a life insurance policy to an applicant.

"2. Residence in the neighborhood of such an institution would not be regarded as an adverse factor."

San Francisco Health Board

In 1909, the San Francisco Board of Health expressed a favorable decision on the question of permitting the local anti-

tuberculosis society to operate a dispensary in a two-story building especially constructed for the purpose, located in a fairly prosperous and thickly settled residential section of that city. The following extract of an account of the decision is taken from the "San Francisco Call," September 8, 1909:

"That a tuberculosis dispensary in a densely populated district is not a menace to public health was the verdict of the sanitation and legislation committee of the health board yesterday, this decision being the direct outcome of the controversy between the Jackson Street Association and the San Francisco Association for the Study and Prevention of Tuberculosis. The property owners maintained that a dispensary of that character was a public menace, while the others held that far from being a danger to public health, it would be a public benefit."

New York State Health Department

A summary of the decisions rendered by the New York State Department of Health under the law of 1909 (see page 31) shows that in the first three years, 1909-1911, twenty-seven cases were decided. Of this number eighteen applications were granted, six were withdrawn before decision was rendered, and only six were denied.

Two of the applications denied were for locations at Liberty, New York, and one at Narrowsburg in the same region. Some years ago the village of Liberty was a summer resort, but like many another interior resort, it had to yield its popularity to the seashore and the mountain playgrounds with special attractions, which have been made accessible to the public in recent years by railroads. The village apparently owes its present prosperity to the fact that it has become within the last ten years a well-known refuge for consumptives. Some of the inhabitants of Liberty fail or refuse to face the very apparent facts of the case and continue to oppose the influx of consumptives.

The application of Brith Abraham, a Jewish insurance order, in 1910, was denied on the grounds that the village and town of Liberty were already bearing their share of the burden of caring for tuberculosis cases and that the time had come when those desiring to erect sanatoria should be pointed in another direction. The application of Dr. Horace Greeley to establish a sanatorium at Liberty at a later date was denied on the same grounds, with the exception that Brith Abraham asked for permission to erect a sanatorium on unimproved property, while Greeley asked for permission to establish a sanatorium

in a welladapted farmhouse on improved property of sixty acres just outside of the village.

At the Greeley hearing it developed that if he (Greeley) wished to conduct a boarding house for tuberculosis cases or other persons or both, he might do so without asking permission from the local or state authorities. He might use sanitary precautions or he might not, provided he did not wish to conduct a "sanatorium" for tuberculosis cases. The residents of Liberty who opposed the location seemed indifferent as to whether the applicant conducted a boarding house, but they did object to a sanatorium on the grounds that it would give Liberty an undesirable reputation as a resort for consumptives, because of the advertising that would be used.*

* Copies of the opinion of Commissioner Porter in the Greeley case are on file in the office of the National Association.

CHAPTER VI

Court Decisions

Where the location of hospitals has been so bitterly opposed, it is natural that in a number of instances recourse should have been had to the courts. Some of their decisions rendered in cases of this character are particularly pertinent.

Boston, Mass.

The courts of Massachusetts were among the first to give recognition to the status of a tuberculosis sanatorium in a given community. In 1893, the Supreme Court of Massachusetts, in the case of the Free Hospital for Consumptives of Boston, decided that this institution was not a menace either to property or to health. The decision which was based upon the testimony of the best experts that could be secured, has since been sustained by the benefit which the institution has been both to the health and property of the community.

Asheville, N. C.

In January, 1909, the Sisters of Mercy of Asheville, N. C., were temporarily enjoined by the courts from operating a sanatorium for tuberculosis sufferers. Later, the injunction was removed and the Sisters were permitted to operate their sanatorium.

Orange, N. J.

In 1909, a temporary injunction was issued against continuing the tuberculosis camp at Orange, N. J., but motion for a permanent injunction was later denied. The camp consisted of a remodelled barn located on the rear of the property of the Orange Memorial Hospital and near to the abutting property

of residents whose homes faced on the street back of the hospital. The residents maintained that the camp was a nuisance and menaced both their property values and their health.

Vice-Chancellor Howell's opinion on the case (Brikholz vs. Linsley), is contained in a letter to the defendant's lawyer, A. F. Skinner, Newark, N. J., which is printed in full:*

"In the case of the tuberculosis camp in Orange, I have come to the conclusion that an injunction should not issue, and I give you very shortly my reasons for denying the motion, and will ask you to send a copy of this letter to Mr. Lord.

"Hospitals and pest houses are not nuisances *per se*. Their character as nuisance depends upon their manner of operation, and that operation, in order to be liable to the injunction process of the court, must be of such character as to damage the complainant, not generally, but with respect to the use of his property. There are many things, which a person does not like to have planted next door to his residence, but which are entirely beyond the reach of the law of nuisances. The Camp, so-called, seems to be conducted with great care and propriety. The answering affidavits are very full, and while they show a situation which is unpleasant and which no one would like to have next door to him, yet, I think that the affidavits show that the business is so carefully carried on and the rights of the adjacent property owners so well observed that it is impossible for me to say that the complainants are suffering any special damage over and beyond that is suffered by every member of the community.

"There is another argument, which comes to mind from the character of the neighborhood; if the camp should be enjoined, there still remains in the same neighborhood, the tuberculosis ward of the Orange Memorial Hospital. It is true, that the hospital patients do not enter and leave the premises from the street, on which the complainants live, but it is there and the injunction in this case would not remove any objection to the operation of a hospital.

"I have come to this conclusion without any reference to the statutes, which were cited, because I do not see anything in either of these three acts can result in giving the complainants, as private suitors, any new or additional right or cause of action. It may be that these statutes would be available to the public in a public prosecution, but I fail to see how the complainants can derive any benefit from them in this private action.

"As I look at the complainants' case, it is and must be directed to show facts, which will convince the court that the camp is being conducted in such a way as to make a nuisance. This is the question of fact, which ought to be investigated on the final hearing.

"I will advise an order denying the motion."

Richmond, Va.

In an effort to prevent Dr. William Parker, of Richmond, Va., from operating the Chimbarazo Sanatorium, the city council passed an ordinance requiring a license from the Board of Health to operate such an institution within the city limits. The courts declared the ordinance null and void on the grounds that the council had no power to enact it.

* Copies of the petition and other papers in the case are on file in the office of the National Association.

Seattle, Wash.

In the case of Everett vs. Paschall, (61 Wash. 47) the Supreme Court of the State of Washington in 1910 issued a permanent injunction restraining Paschall from operating a private tuberculosis sanatorium in the residential section of Seattle. The sanatorium which accommodated about ten patients, was located directly across an alleyway from the property of the plaintiff. The lower court denied an injunction but the supreme court reversed the decision on the grounds that the sanatorium constituted a nuisance. The decision apparently applies only to hospitals in residential sections. Following is a digest of the court's opinion:

Defendant maintained a private sanatorium for the treatment of persons afflicted with tuberculosis, and plaintiff prays for an injunction. The lower court found as follows: That the danger zone of tuberculosis is about three feet, beyond which there is no danger of infection or contagion; that defendant conducted his sanatorium with a due regard for the safety of his patients and the public, that it was a great benefit to the community for the disease is very prevalent, one-seventh of the deaths in the United States being caused thereby; that it was not a nuisance *per se*; and that plaintiffs were not entitled to an injunction. The Supreme Court of Washington held that the hospital is not a nuisance within the definition of the common law, for it created no physical inconvenience whatever; that but a new element in the law of nuisance has been developed, namely, the comfortable enjoyment of one's property; that under this law the maintenance of the sanatorium is a nuisance. In reaching this conclusion, the court says that, in determining what is a nuisance, regard should be had for the notions of comfort and convenience entertained by persons generally of ordinary tastes and susceptibilities. The discomfort must affect the ordinary comfort of human existence as understood by the American people in their present state of enlightenment. The neighbors have dreaded and fear contagion. Such fear detracted from the comfortable use of their property, so an injunction is allowed.

Redlands, Cal.

In 1910, an effort was made to prevent Dr. G. F. Moseley from operating the Mentone Sanatorium at Redlands, California. The buildings had previously been used for a sanatorium but the people objected to their being used again for the purpose. In order to restrain Moseley, the Board of Supervisors of San Bernardino County, in July, 1910, passed an ordinance with a fine and imprisonment penalty attached, declaring tuberculosis hospitals located in residential districts a menace and a public nuisance and prohibiting their location.

As a test case, Dr. Moseley was put in jail and applied for a writ of habeas corpus. On December 21, 1910, Judge Frank F. Oster rendered a decision* in favor of the defendant on the

* Copies of this decision are on file in the office of the National Association.

grounds that the Board of Supervisors exceeded their authority in passing the restrictive ordinance. The question of whether the hospital was a menace was not decided or considered by the court. The decision on this point reads:

"Now, while there has been much evidence introduced here on the theory of a public nuisance, we have no concern in that matter on this hearing. It is simply a question of whether the board of supervisors have the constitutional legislative power to enact this particular ordinance, and inasmuch as they have sought to make that a public nuisance which, by their own specifications, constitutes only a private nuisance, it seems to me their authority is absolutely null and that they have no such power, and that the ordinance is, therefore, unreasonable. It follows that the defendant must be discharged from custody."

Houston, Tex.

A more recent and far more pertinent and explicit decision was rendered in August, 1913, in connection with the attempt of the Anti-Tuberculosis League of Houston, Texas, to locate a tuberculosis dispensary in that city. Permission was gained from the county authorities to erect a special building for the purposes on the grounds of the county jail in the business district of the city. Property owners and some physicians, including the local health officer, protested against the site and the case was taken into court. After an extended hearing, in which evidence of every possible nature bearing on the case was admitted, Justice Kittrell* rendered a decision in favor of the League, which is of more than ordinary and local significance. Part of the opinion is quoted herewith:

"In this case, the evidence manifestly preponderates in favor of the defendants. Under that point, there is no reasonable grounds for difference of opinion.

"The question involved is whether the establishment of a clinic for the treatment of persons afflicted with either incipient or clearly developed tuberculosis will in all probability be so harmful to property owners and residents in the section of the city adjacent to the site of the proposed clinic, as to give them the right to injunctive relief. The case is one in which the preferences and interests of the few must yield to the welfare of the many. In every part of the United States, warfare is being systematically and scientifically waged against tuberculosis, both for the purpose of prevention and cure. The results achieved in New York show a reduction in the number of cases of something like 30 per cent., and the increase of the dreadful disease makes it necessary for the protection of society that all reasonable means be resorted to in order to accomplish its extermination or at least such mitigation of its ravages as can be brought about by advanced methods of treatment.

"The work must be done somewhere or be stopped altogether, and the highest interests of society demand that it should not be stopped and the power of the court should not be put in motion to arrest such work except upon the clearest proof that its prosecution will inevitably result in injury to petitioners.

* Copies of the opinion in this case are on file in the office of the National Association.

"The proximity to the county jail is also urged as a ground for relief, but the hygienic conditions of that institution are far better than are those of many homes, and the evidence is not sufficient to show that such danger exists as is alleged.

"The evidence, the far greater part of which was not only heard but taken down in writing with my own hand, convinces me that a clinic, such as is proposed, when conducted along the lines marked out, will not imperil the health of the neighborhood, or result in any depreciation of the value of property, and because of the preponderance of the evidence is against the contention that it will, a permanent injunction is refused, and the temporary injunction will be, and is, dissolved."

CHAPTER VII

Summary and Conclusions

Hospital not a Menace to Health

Among the many conclusions which may be drawn from the array of facts presented in the preceding chapters, none is more evident than that a tuberculosis hospital in itself is not a menace to the health of those living near it. This is the most frequent and, in practically all cases, the basic objection to the location of tuberculosis hospitals or sanatoria. Obviously, if there were no fear of infection, the hue and cry frequently raised relative to the probable damage to property through the location of an institution for tuberculosis would be largely dissipated and would lose its force.

That such an objection, however, is not a valid one, is shown in the first place by the testimony of practically every superintendent who has expressed an opinion with reference to the effect of his particular institution upon the health of those living near it. In not a single case has the National Association been able to find evidence that would indicate the slightest danger of infection from a tuberculosis sanatorium to those who live on surrounding property, or who pass the doors of the institutions at frequent intervals. The testimony of American hospital superintendents is borne out furthermore by that of similar officers of European institutions who have been asked about this question. In addition, it is greatly strengthened by proof submitted from many other sources, which demonstrates that the infection of healthy employees through association with patients within a well-regulated sanatorium is almost unknown.

In the second place, this conclusion is affirmatively recognized in opinions by various courts of law and official bodies such as local and state boards of health, that have been asked to pass

upon the question of the infectiousness of tuberculosis. The unanimous opinion expressed in practically every court decision on this point, is that there can be no danger of infection from a tuberculosis sanatorium to those who live near it. Even the courts that have held adversely on the question of the location of particular institutions, have taken pains to emphasize the lack of danger of infection to the community.

Again, authorities are substantially agreed in the conclusion that this disease is not transmitted from an institution to a nearby dwelling nor from patients in passing a residence or business establishment, nor from ordinary momentary contact with tuberculous individuals in the streets and business places where a tuberculosis institution is located. Medical science, reinforced by pathological and bacteriological research, is almost unanimous in the opinion that infection from tuberculosis can be contracted only through intimate contact, directly with the infectious discharges of a consumptive, and not through germs that are blown through the air and inhaled now and then by the chance passer-by. This experience, coupled with the well-known and easily demonstrable fact that the rules of a tuberculosis institution forbid uncleanness and promiscuous spitting, and thereby provide against the carriage of germs from such an institution to neighboring dwellings, should be conclusive proof of the lack of danger to those who are afraid to have a tuberculosis institution located in their neighborhood for fear of possible infection.

Hospital Not Detrimental to Property

A second conclusion, which is obvious from a study of the preceding pages, is, that except in rare instances a tuberculosis institution does not diminish the value of surrounding property. It is true, as Mr. Baldwin pointed out in his study of this subject, that any building, no matter what its use may be, which is not in harmony with the other buildings of a particular neighborhood, whether of a residential or business character, detracts from the value of surrounding property. This would be true whether the building were a church, a school, a jail, or a hospital.

On the other hand, the answers to the various questionnaires sent out in the different studies which are outlined in this pamphlet indicate that, for the most part, a tuberculosis hospital or sanatorium has little or no effect upon the value of property

immediately surrounding it. In some instances property values have risen or have decreased, but in the former cases usually it has been in spite of the sanatorium, and in the latter, the influences at work would have diminished property values whether the tuberculosis institution were in existence or not. There are hardly any cases on record where conclusive evidence is at hand that a tuberculosis hospital or sanatorium has had any permanent and lasting effect upon the value of surrounding property. In a few instances, which have already been noted, the sanatorium has apparently had an immediate effect, but this has not lasted. If other influences in the general neighborhood have tended to raise property values, the lots and farms in the vicinity of the sanatorium have risen in price along with those farther removed.

This conclusion is affirmed by a careful study of the property values around the five institutions which were studied in careful detail. Even in the neighborhoods where local opposition had originally been strong and in districts where to some extent opposition is at present manifest in a few quarters, no evidence could be found that the tuberculosis sanatorium as such had any serious effect upon the value of surrounding property. In the case of Seton Hospital, or the Sprain Ridge Sanatorium, where the population is growing rapidly around the institutions, the hospitals have had no apparent effect upon land values, even though some effort has been made on the part of certain property owners to utilize the institution as a means for decreasing their assessments. A study of the tables appended to this report will further demonstrate this fact.

Initial Opposition Seldom Lasts

There are few cases on record where the initial opposition, which would have prevented the location of a given institution, lasted more than a year after the institution was opened. As soon as the neighbors of a tuberculosis sanatorium realize its true character and see that it does not have the harmful effects which they had believed it would, the opposition generally dies out. With the disappearance of the opposition, the land usually continues to increase or decrease in value according to its normal tendency. There can be no stronger evidence as to the foolishness of the opposition of those who object to the location of tuberculosis sanatoria than this fact, that not a

single instance can be found where continuous organized opposition has existed for more than two years after the establishment of a sanatorium, although in scores of instances such organized opposition prior to the establishment of the institution was apparently strongly entrenched.

Some Minor Objections to Sanatoria Refuted

In addition to these main arguments advanced by those who object to the location of sanatoria in their neighborhood there are a number of objections of a minor character which should be mentioned.

It is frequently said that the sight of sick persons wandering about a neighborhood is disquieting and depressing. In a few instances, where sanatoria or hospitals have been located unfortunately near public highways, this objection has some weight. Where it is proposed, however, to establish a modern institution, under modern conditions, and with modern methods of supervision, this objection can have little or no value. Tuberculous patients in sanatoria and hospitals are not allowed, as a common practice, to roam around at will. The most fundamental principle of method in the treatment of tuberculosis is that of a rigid regime where every movement of the patient is under absolute control and supervision. In the regime of most tuberculosis hospitals it is an offense punishable by discharge for a patient to leave the grounds without special permission. When patients are allowed to exercise sufficiently so that they may walk beyond the limits of the hospital grounds, and where they will be seen by the general public, they are not usually in such physical condition as to present an unpleasant appearance to anyone whom they are liable to meet. Neither can it be said that they are in such instances liable to transmit tuberculosis to those with whom they come in contact. If a tuberculous patient is impressed with one thing more than another from the very day he enters a sanatorium until he leaves it, it is the danger of infecting others and the methods of protecting those with whom he associates.

There are others who raise the objection that tuberculosis sanatorium buildings are not attractive and therefore are objectionable. This is an objection which has little or no weight at the present time. A few years ago, when the "shack" type of construction was employed with too much frequency,

this might have been said. The present tendency, however, in tuberculosis hospital construction is to provide buildings which are not only utilitarian in purpose, but which are durable and possess real architectural merit and beauty.

The objection has also been raised that tuberculous patients traveling to and from railroad stations or from central points of transportation are a menace to those with whom they come in contact. There is some division of opinion upon this subject. It would seem to be unwise in many instances for a considerable number of tuberculosis patients to travel in a public conveyance if some other form of conveyance could be procured. As a general rule, however, tuberculous patients do not travel in public conveyances in any such numbers as to create a reasonable fear in the minds of those with whom they come in contact. In Boston, where an effort was made at one time to prevent the local association from allowing tuberculous patients to travel on the street cars to and from the day camp, it was demonstrated that the very persons who had complained were the worst offenders in promiscuous spitting, and that there was practically no danger from the tuberculous patients. The presence of an educated patient, who has been to a tuberculosis sanatorium, or who is going to one after having submitted to an examination for admission, is far less dangerous to the traveling public than the presence of an ignorant one who does not know that he has the disease, and who takes no pains to dispose of his sputum in a sanitary manner. The National Association has still to discover any case of infection from tuberculosis which may be traced directly or indirectly to contact with patients traveling to or from a tuberculosis sanatorium in a public conveyance.

Hospitals a Benefit to the Community

The testimony of tuberculosis sanatorium superintendents confirmed by first-hand investigation and opinions of others who are in a position to know, suggests that in many cases a tuberculosis institution is a real benefit to the community in which it is located. This is a question upon which it is difficult to secure accurate and reliable information. If, however, the reports of those who have had experience along this line may be relied upon, it would indicate that in more than one-half of the cases, tuberculosis institutions have directly helped those living in the neighborhood in one way or another.

A tuberculosis sanatorium has frequently proved a blessing, possibly in disguise, by educating almost unconsciously the people living near it to live and sleep out of doors. The testimony of superintendents and others to the effect that the building of a tuberculosis sanatorium has created a demand for sleeping porches and other forms of outdoor appliances, is what one might expect from the presence of such an institution. Naturally, such a practice has a marked benefit upon the health of those who employ it. Statistics are lacking to demonstrate conclusively the relative value of a tuberculosis sanatorium upon the death rate of the persons living in and around it. The experience, however, of such health centers as Rutland, Mass., Asheville, N. C., Saranac Lake, N. Y., and elsewhere, would indicate that the death rate of longtime residents is apparently lower since the coming of institutions for tuberculosis than previous to their presence. This experience is shown by the much more careful statistics of various German and English sanatoria.

A second benefit which a tuberculosis sanatorium often brings to the community is, that it provides a market for the supplies of farmers and tradesmen and for the labor of the men and women in the neighborhood. The testimony of a score of superintendents, confirmed by the published annual reports of their institutions, demonstrates the validity of this conclusion. A tuberculosis sanatorium, whether it be a private institution for patients of means, or a public institution with a large pay roll and a considerable number of patients, brings money into the community in which it is located, and thus adds not a little to the material prosperity of the district. The expenditure of sums ranging from \$20,000 to \$150,000 a year in a given town or city, must have a beneficial effect upon the business life of that community.

Some General Suggestions as to Location

It is difficult in a report of this character to offer suggestions with regard to the location of a sanatorium or hospital that will fit all sorts of conditions, since it is obviously necessary that some institutions be located in urban districts, while others may just as well be located in rural neighborhoods. Furthermore, in many instances, considerations other than those which would relate merely to the possible opposition of neighbors

would require the location of a sanatorium in one place as opposed to another.

In general, however, it is obvious that the location of a tuberculosis sanatorium in a rural rather than an urban district is preferable. The majority of institutions in this country are so located. The very fact that it is desirable to have plenty of room, unrestricted light, and ventilation in and around a tuberculosis institution makes a site of this character almost a necessity.

It is desirable that a tuberculosis institution should not be located too near a public highway or road. Satisfactory landscape gardening, or the location of the institution at a distance from the road will prevent much unpleasantness and opposition. A site which affords advantages of this character should be sought for. Nearly every strong objection to a tuberculosis institution recorded in the preceding pages was entered by a resident immediately across the road from an institution which was unfortunately situated too near to the highway. An inconspicuous and tastefully arranged institution, even in a suburban district, will not cause opposition, while the same grade of institution, considered merely from the clinical point of view, if located in a conspicuous place and surrounded by residences, might meet with violent opposition.

Wherever possible an institution for tuberculous patients should provide its own conveyance to and from the nearest railroad station. Many institutions have made this mistake and have located in places where it has been necessary to transport patients in conveyances along with the residents of the district. While the danger from such a course as this can be minimized and may not exist at all, it is sure to cause friction if the practice continues, and it is decidedly better to avoid this possible opposition by providing an ambulance or some other attractive vehicle.

In the location of a given sanatorium, hospital, dispensary, open air school, or other tuberculosis institution, three factors should determine finally the selection of a site. These are:

(1) The suitability of the land for the buildings which it is proposed to erect, considered merely from the point of view of physical advantages, grouping, attractive surroundings, and future economic administration.

(2) The attitude of those who live and own property in the neighborhood of the suggested site.

(3) The accessibility of the proposed institution to the centers of population considered from the point of view (a) of the future patients, their friends and relatives; (b) the physicians and anti-tuberculosis organizations who must co-operate with it; and (c) the economical purchase and delivery of supplies.

In conclusion it should be borne in mind that tuberculosis hospitals may be located in such a manner that the opposition which exists prior to their establishment will pass away after they have been established. It is not well, to countenance unreasonable fear and prejudice. Neither, on the other hand, is it wise to run counter entirely to the expressed wishes and feelings of those who live in the neighborhood of the proposed institution. There is a happy medium and a real propriety which will show those who wish to establish tuberculosis institutions how they may turn these energies of fear and prejudice to the support of their own work.

APPENDIX

TABLES SHOWING CHANGE IN ASSESSED VALUATION OF SURROUNDING PROPERTY OF FIVE HOSPITALS

The figures of the following tables are for land alone, with the exception of those for Hospital No. III, which include buildings. Some of the tables are not complete because the figures were not available.

Hospital No. I (Seton Hospital, New York City)*

The numbers indicate city blocks of irregular shape and of greatly varying size. The plots of Table 1 are separated from the hospital grounds only by the width of the street and are considered adjoining property. The hospital grounds themselves comprise an entire city block.

TABLE 1
ASSESSED VALUATION OF ADJOINING PROPERTY, SHOWING PRICE BY PLOTS

Plot No.	1900	1905	1910	1913	1914
Hospital.....	\$ 80,000	\$110,000	\$175,500	\$385,000	\$383,000
1.....	17,700	30,000	48,000	86,800	86,800
2.....	14,050	24,800	73,900	145,700	145,700
3.....	16,090	28,200	91,400	157,000	157,000
4.....	9,500	18,000	27,900	33,000	33,800
5.....	2,200	5,500	8,500	7,000	7,000
6.....	15,000	23,000	34,400	39,600	29,600
7.....	7,100	14,000	20,000	32,800	32,800
8.....	17,500	38,000	68,300	87,000	83,900

*See Map facing page 27.

TABLE 2
PROPERTY ONE BLOCK REMOVED

Plot No.	1900	1905	1910	1913	1914
I.....	\$ 10,600	\$ 20,000	\$ 32,200	\$ 53,300	\$ 53,300
II.....	21,080	31,400	54,300	101,800	98,600
III.....	13,505	28,500	52,400	76,700	73,900
IV.....	10,000	22,000	30,800	51,300	51,300
V.....	6,500	12,000	16,500	33,000	33,000
VI.....	6,500	12,000	15,800	31,600	31,600
VII.....	7,800	11,200	17,700	29,600	29,600
VIII.....	4,250	7,200	8,800	15,700	15,700
IX.....	8,500	14,000	25,700	46,500	46,500
X.....	10,300	17,700	28,200	49,000	49,000
XI.....	15,950	27,100	38,200	61,600	62,200
XII.....	18,850	42,700	45,150	82,100	82,100
XIII.....	6,300	21,500	26,800	47,700	47,700

TABLE 3
PROPERTY TWO BLOCKS REMOVED

Plot	1900	1905	1910	1913	1914
A.....	\$ 23,500	\$ 40,000	\$ 70,000	\$109,700	\$108,000
B.....	15,905	33,900	53,500	108,500	96,700
C.....	18,700	35,000	59,600	103,000	88,000
D.....	13,000	18,000	47,200	114,700	111,300
E.....	18,000	30,000	66,500	138,900	141,500
F.....	6,000	9,000	14,000	25,000	25,000
G.....	5,500	8,000	12,200	21,800	21,800
H.....	7,000	11,000	20,100	33,700	32,800
I.....	4,100	6,300	9,100	14,500	14,500
J.....	6,160	12,300	24,110	30,300	30,300
K.....	9,050	19,500	33,900	51,500	51,500
L.....	9,900	19,300	28,800	40,600	40,200
M.....	4,000	8,000	13,500	27,600	27,000
N.....	4,000	7,000	13,500	25,000	25,000
O.....	7,000	14,000	19,300	39,500	39,500
P.....	7,500	12,460	16,500	32,000	32,000
Q.....	14,700	22,800	30,800	56,200	56,200
R.....	4,400	6,500	9,700	22,000	22,000
AA.....	40,250	61,800	124,800	183,600	131,100

Hospital No. II (Sprain Ridge Hospital, Yonkers, N. Y.)

TABLE 1
ASSESSED VALUATION OF ADJOINING PROPERTY, SHOWING PRICES
PER ACRE

Plot No.	1906	1909	1912	1914
Hospital.....	\$ 450	\$ 450	\$ 450	\$ 450
1.....	380	380	400	500
2.....	200	200	300	300
3.....	200	200	300	300
4.....	1,000	500	500	1,000
5.....	630	815	815	1,185
6.....	1,000	1,000	1,000	1,000
7.....	1,275	1,220	.....	1,963
8.....	1,310	1,190	.....	1,686

TABLE 2
NEARBY PROPERTY

Plot No.	1906	1909	1912	1914
9.....	\$ 550	\$ 550	\$ 550	\$ 1,000
10.....	425	425	425	425
11.....	500	500	500	1,000
12.....	1,500	1,500	2,000	2,000
13.....	1,125	1,525	1,525	1,525
14.....	1,150	1,600	1,600	1,600
15.....	650	650	650	1,150
16.....	1,000	1,000	1,000	1,175

Hospital No. III (Bowne Memorial Hospital, Poughkeepsie, N. Y.)

TABLE 1
SHOWING ASSESSED VALUATION OF ADJOINING PROPERTY PER
PLOT, WITH ACREAGE OF PLOTS

Plot No.	Acreage	1908	1909	1910	1912
1.....	7½	\$1,000	\$1,000	.....	\$1,200
2.....	80	6,000	6,000	\$6,600	6,600
3.....	59	3,600	3,600	3,860	{ 55 acres 2,500 }
4.....	12	1,600	1,600	1,760	1,760
5.....	4	1,900	1,800	2,000	2,000
6.....	{ 21 60 }	2,500 3,500	2,500 3,500	2,750 3,850	2,800 3,800 }

TABLE 2
NEARBY PROPERTY

Plot No.	Acreage	1908	1909	1910	1912
7.....	..	\$ 800	\$ 800 { 374 acres }	\$ 800 { 200 acres }	\$ 900 { 100 acres }
8.....	..	.....	20,000	15,000	5,000
9.....	30	.....	11,000	12,100	12,100
10.....	10	.....	4,500	4,950	5,000
11.....	..	500	500	550	550
12.....	20	3,500	4,000	4,400	4,000
13.....	{ 22 19 }	2,200 5,000	2,200 5,000	2,420 6,600	2,400 6,600

Hospital No. IV (Montefiore Home Country Sanatorium, Bedford Hills, N. Y.)*

TABLE 1
ASSESSED VALUATION OF ADJOINING PROPERTY, SHOWING PRICE PER
PLOT, WITH ACREAGE OF PLOTS

Plot No.	Acreage	1903	1906	1908	1911	1913
1.....	83	.....	\$15,000	\$15,000	\$15,000	\$15,000
2.....	75	\$7,000	.....	7,000	7,000	7,000
3.....	..	6,450	.....	{ 85 acres 4,700 }	{ 85 acres 4,700 }	{ 85 acres 7,000 }
4.....	122	6,000	.....	12,000	12,000	12,000
5.....	60	3,500	.....	7,000	7,000	7,500
6.....	130	.....	10,500	9,000	10,000	10,000
7.....	75	.....	.....	5,000	.....	7,000
8.....	21	.....	.....	.....	.....	5,000
9.....	71	.....	3,500	3,500	3,500	3,500
10.....	68	15,000	.....	20,000	25,000	35,000
10.....	..	{ 189 acres 12,250 }	.....	{ 151 acres 11,000 }	{ 151 acres 15,000 }	{ 151 acres 20,000 }
12.....	80	.....	10,000	10,000	16,000	16,000
11.....	185	12,500	25,000	25,000	35,000	50,000

TABLE 2
NEARBY PROPERTY

Plot No.	Acreage	1903	1906	1908	1911	1913
I	40	.....	\$ 2,400	\$ 2,400	\$ 4,000	\$ 7,500
III	150	\$12,000	.....	20,000	30,000	{ 73 acres 22,000 }
IV	120	.....	15,000	15,000	15,000	15,000
V	76	12,000	.....	25,000	30,000	30,000
II	34	.....	7,500	6,500	10,000	7,000

*See map facing page 26.

Hospital No. V (Gaylord Farm Sanatorium, Wallingford, Conn.)

TABLE 1
SHOWING ASSESSED VALUATION OF ADJOINING PROPERTY PER
PLOT, WITH ACREAGE OF PLOTS

Plot No.	Acreage	1903	1905	1910	1913
1.....	34	\$ 640	\$ 600	\$ 811	\$ 810
2.....	70	.....	840	2,200	2,200
3.....	12	.....	.....	204	204
4.....	44	460	525	972	{ 30 acres 600 }
5.....	92	.....	1,800	{ 84½ acres 2,320 }	{ 84½ acres 1,555 }
6.....	123	1,800	1,800	4,200	4,200
7.....	70	1,050	1,190	{ 108 acres 1,920 }	{ 108 acres 1,920 }
8.....	38	.....	494	865	865

TABLE 2
NEARBY PROPERTY

Plot No.	Acreage	1903	1905	1910	1913
9.....	68	\$ 800	\$ 800	\$1,765	\$1,765
10.....	62	1,035	1,035	1,797	1,800

MS. A. 12. 500

**END OF
TITLE**